

Knowledge of and Attitude Toward Transsexualism Among College Students

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Abstract Transsexualism is characterized by, among other things, an aspiration for sex reassignment surgery. The aim of this review was to determine the extend of the knowledge and the approach of Lodz college students toward transsexualism and to find out what rights students would grant to transsexual persons. The questionnaire studies were carried out in a group of 300 students. The studied group consisted of 51% of men and 49% of women with the median age of 23.2 ± 1.1 years. About 53.6% of questionnaire students gave correct answer to the question of the definition of transsexualism. Most of questionnaire students think that transsexuals should have the possibility of legal change of name (67%) or undergoing hormonal therapy (70%) and surgical treatment (63.5%). Most of respondents were against the refunding hormonal therapy (63.4%) and surgical treatment (65.6%) from social insurance. The knowledge of students from Lodz universities about transsexualism is comparable with that of their foreign counterparts. Student's attitude toward legal and surgical sex change in transsexuals is positive. Female students show greater understanding of transsexual needs than male students.

Keywords Transsexualism · Knowledge · Attitude · Rights

Introduction

Transsexualism is considered to be an extreme end in a large group of gender identity disorders characterized by, among other things, an aspiration for sex reassignment surgery [1]. It is a border form of gender dysphoria syndrome, which means

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that an individual has a strong feeling of identification with the opposite sex, determined by primary and secondary sex characteristics [2]. In medical literature the phenomenon of transsexualism was described by Frankel in 1853, however, the concept itself was for the first time used by Benjamin in 1953 in his article, in which he coined up the term “transsexual” for such individuals [3, 4]. Currently transsexualism is classified in International Classification of Diseases (ICD-10) in the category of adult personality and behavior disturbances, in the group of gender identity disorders as F.64.0. In the description of transsexualism intense desire to adopt the social role of the other sex, discomfort with own anatomical features and intention to acquire the physical appearance of the other sex by hormonal and surgical treatment are emphasized [5, 6].

The published data concerning the prevalence of transsexualism in population over 15 years of age per 100,000 people is 23.6 in Singapore (1988), 8.18 in Scotland (1998), 4.72 in Netherlands (1996), 2.25 in Germany (1996) and 1.9 in England (1974) [7–11]. In Poland it is estimated that 1 in 17,000 girls and 1 in 57,000 boys feel identification with the opposite sex [12].

Etiology of transsexualism, despite numerous studies on this phenomenon, remains unknown and is controversial. Biological causes, mainly neurophysiologic, endocrinologic and genetic factors, and psychological causes connected with family environment and transsexual personality have been suggested [13]. Dorner et al. [14] notice the influence of androgen levels on brain organization during prenatal period. Zhou et al. [15] observe differences in size of the bed nucleus of the stria terminals (BSTc), which in transsexual men are similar in size to BSTc in women. It has also been stated that the underlying cause of transsexualism in women is not in excessive androgen secretion; in men on the other hand a relative excess of LH secretion can have some influence [16, 17]. Genetic factors are also not excluded, they can influence the structure of androgens receptors, estrogens receptors and aromatase activity [18]. Among psychological factors probably important in the etiology of gender identity disorders are the way of upbringing, relations with parents or parents divorce [19]. It is also possible, as reported by Zucker and Green [20], that parents of transsexual children wanted to have a child of the opposite sex, that is why they encourage in the child behaviors specific of opposite sex. There are also articles which suggest that gender identity disorders are the symptoms of psychosis, mainly schizophrenia [21, 22].

In most European countries there are separate legal acts, which determine the rights for transsexuals, including e.g. the right for free medical care (psychotherapy, hormonal therapy and surgical procedures) as well as the right for change of sex and name in birth certificate, with all ensuing consequences [23, 24]. Poland does not have any appropriate legislation with regard to sex change and so far judgment has been based on exponential interpretations, in anticipation of the transsexual act [25].

Interdisciplinary and multifaceted character of transsexualism is reflected in studies and publications on this phenomenon [1, 13, 14, 20, 22, 26]. Medical literature largely focuses on the issues of etiology, methods and treatment results, transsexual persons characteristic and legal aspects, however, there are very few publications referring to awareness and approach of the society to this problem [27–30]. The latter is particular of importance since a vital prognostic factor in the treatment of people with gender identity disorders is social acceptance. Also the rights granted to transsexuals persons are the result of knowledge and tolerance of communities towards them.

The aim of this review was to determine the extend of the knowledge and the approach of Lodz college students toward transsexualism and to find out what rights they would grant to transsexuals persons.

Materials and methods

The questionnaire studies were carried out in a group of 300 students from three universities in Lodz (Technical University of Lodz, University of Lodz, Medical University of Lodz) among third year students and older. The authorities of all universities were informed about the aim of the research and gave consent. The study researchers chose students as the future representatives of educated social group, which will be forming public opinion. All the questionnaire students were free of gender identity disorders. The studied group consisted of 51% of men and 49% of women with the median age of 23.2 ± 1.1 years.

A special questionnaire was prepared for the study. It contained 30 questions related to respondent's sex, birthplace, knowledge about the definition and etiology of transsexualism and also rights which students would grant to transsexuals, including the right for free medical care, marriage and children adoption. The possible answers were "definitely yes", "rather yes", "I do not have opinion", "rather no" and "definitely no". The answers "definitely yes" and "rather yes" were added and consider as an answer "yes". The same was done with answers "definitely no" and "rather no".

The analysis between statistical features correlation was done with chi-squared test and its intensity was measured with the use of Yule's correlation coefficient (Q) or C-Pearson's coefficient (C). The level of significance was $p < 0.05$.

Results

Most of the students, 61% came from a big city (over 100,000 of inhabitants), 27.4% from a smaller towns and 11.6% from a villages.

To the question if respondent personally knew transsexual person 12 students (4% of all) answered positively, but out of this group only 4 chose correct answer to the question concerning the definition of transsexualism and were able to differentiate it from transvestitism and homosexuality. More than half of questionnaire students (53.7%) gave correct answer to this question, while 19.6% of students confused the term of transsexualism with transvestitism and/or homosexuality (Fig. 1). Chi-squared test did not reveal the correlation between place of birth and knowledge of transsexualism. It is worth noticing, however, that respondents from a big city answered to this question correctly more often than students coming from a smaller towns or villages.

More than half of the students (55%) believe that transsexualism does not depend on environmental factors but is dependent on genetic factors (54%). About 45.6% of the students rejected the influence of upbringing on development of gender identity disorders (Table 1).

The level of tolerance and acceptance of transsexualism was evaluated on the basis of the question if transsexual person could be respondent's friend or co-worker.

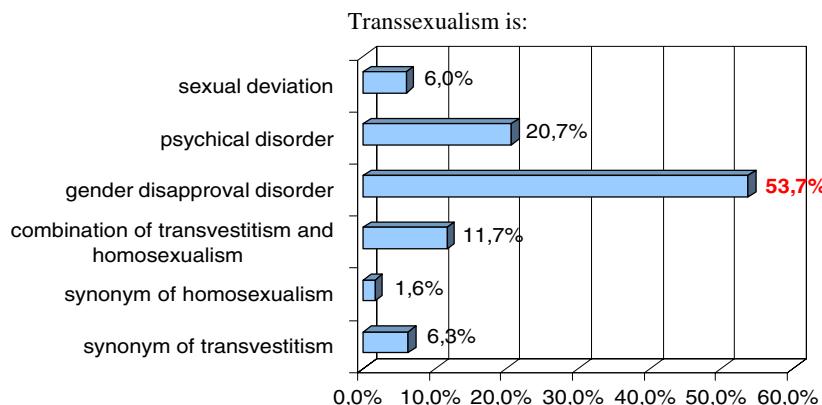


Fig. 1 Respondents' answers to the question concerning the definition of transsexualism

About 62.3% of students were ready to make friends with transsexual persons and 16% were not. About 75% of questionnaire students would accept transsexual person as his/her co-worker, 12.3% would not and the remaining 12.7% had no opinion (Table 1). There is positive correlation of moderate intensity ($Q = 0.37$ and $Q = 0.3$) between female sex and tolerance and acceptance of persons with gender identity disorders. Also chi-squared test showed statistically significant correlation of small intensity ($C = 0.16$) between birthplace and tolerance of transsexualism. Students from smaller towns and villages more rarely answered positively to these questions.

Table 1 Respondents' answers to the questions enclosed in the questionnaire ($n = 300$)

Question	Answers n (%)		
	Yes n (%)	No n (%)	I do not have opinion n (%)
1. Has transsexualism an environmental basis?	74 (24.7)	165 (55.0)	61 (20.3)
2. Has transsexualism a genetic basis?	162 (54.0)	67 (22.3)	71 (23.7)
3. Can transsexualism be dependent on upbringing?	117 (39.0)	137 (45.6)	46 (15.4)
4. Could a transsexual person be your friend?	187 (62.3)	48 (16.0)	65 (21.7)
5. Could a transsexual person be your co-worker?	225 (75.0)	37 (12.3)	38 (12.7)
6. Should transsexuals have a possibility to a legal change of name?	201 (67.0)	61 (20.3)	38 (12.7)
7. Should transsexuals have a possibility to undergo hormonal therapy?	210 (70.0)	45 (15.0)	45 (15.0)
8. Should transsexuals have a possibility to undergo sex reassignment surgery?	196 (65.3)	65 (21.7)	39 (13.0)
9. Should hormonal therapy be refunded from social insurance?	51 (17.0)	190 (63.4)	59 (19.6)
10. Should sex reassignment surgery be refunded from social insurance?	38 (12.7)	197 (65.6)	65 (21.7)
11. Should transsexuals have right to marry?	128 (42.7)	77 (25.7)	95 (31.6)
12. Should transsexuals have right to children adoption?	69 (23.0)	165 (55.0)	66 (22.0)
13. Should transsexuals have right to work with children in kindergarten or school?	87 (29.0)	126 (42.0)	87 (29.0)

Most of questioned students think that transsexuals should have the possibility of legal change of name (67%) or undergoing hormonal (70%) and surgical (65.3%) treatment (Table 1). In this matters women seemed to be more liberal than men and significantly more often answered positively to questions related to these problems ($Q = 0.52$ in question referring to the possibility of surgical sex change). Students coming from villages significantly more often than students coming from cities answered negatively to these questions ($C = 0.165$ in question referring to the possibility of surgical sex change). Also statically significant correlation between basic knowledge of transsexualism (ability to define it) and positive answer to the question concerning possibility of surgical treatment was demonstrated ($Q = 0.66$).

With regard to financing the therapy for transsexual's the results showed that most of respondents were against the refunding hormonal therapy (63.4%) and surgical treatment (65.6%) from social insurance (Table 1). Our research also revealed that students convinced of genetic background of transsexualism more often excepted the refunding of treatment than students convinced of environmental background ($C = 0.17$).

Of the questioned students 42.7% would grant transsexual persons the right to get married, whereas only 23% to adopt children (Table 1). Also in these matters women more often than men answered positively ($Q = 0.27$). Only 29% of respondents believe that transsexuals could be entitled to work with children in kindergarten and school, with 42% refusing this right (Table 1).

Discussion

Despite many years of wide spectrum studies and many publications related to gender identity disorders transsexualism still is an issue, which arouses much controversy. First study referring to attitude toward transsexualism was published by Leitenberg and Slavin. They compared attitudes toward transsexualism and homosexuality in a sample of 318 university students. This study showed more social acceptance and tolerance toward transsexuals and also analyzed the question of rights, which respondents would grant to transsexuals [27]. Another article concerning to this issue is a study done by Landen et al. The authors made the Swedish national survey in a group of 668 persons (mean age was 44), they investigated attitude toward rights, which transsexuals have in Sweden and degree of tolerance of this phenomenon [28]. Their results revealed that majority of questioned persons would accept transsexual person as his/her friend (60%) or co-worker (71%) [28]. Similar results have been obtained in own studies with 62.3% of students ready to make friends with transsexual and 75% to work with them.

The results of research done by Sanchez et al. [29] showed that 56% of questioned medical students knew the right definition of transsexualism. This correlates with our results, where more than half of the student chose correct definition of transsexualism and differentiated it with transvestitism and/or homosexuality.

Results of survey done by Landen et al. in year 2000 related to legal change of name, hormonal and surgical sex change precisely correlate with our study material of 2006 [29]. However, their comparison shows that students from our group have more positive attitude toward sex reassignment surgery than group surveyed by Landen et al.

Results were also comparable in the aspects of financing of transsexuals treatment. Sixty-three percent of respondents from Landen et al. group and 65.6% in our group think that transsexual persons should bear the costs of treatment themselves [29].

With regard to possibility of children adoption by transsexual persons 43% of respondents from Landen et al. and 51% of women and 39% of men from Leitenberg and Slavin group accepted it [27, 28]. Our results do not correspond with those published data. Only 23% of students in our study approve of the possibility of children adoption by transsexuals.

Ernulf et al. analyzed the relationship between beliefs about the determinants of transsexual orientation and attitudes toward this phenomenon. The authors proved that persons who believe that transsexualism is congenital condition have more positive attitude than persons who believe in environmental origin [30]. Similar conclusions are drawn from survey done by Landen et al., people who believed that transsexualism had biological background significantly more often agreed to sex reassignment surgery, name change, marriage and children adoption [28]. Our material also revealed that students convinced of genetic background of transsexualism more often agreed with treatment refunding. Such attitude can be supposed to results from the conviction that discrimination because of genetic, therefore congenital features is unacceptable.

Our results are in agreement with the above cited articles with regard to more liberal attitude displayed by women toward transsexuals and their rights.

Conclusions

1. The knowledge of students from Lodz universities about transsexualism is comparable with that of their foreign counterparts.
2. Student's attitude toward legal and surgical sex change in transsexuals is positive, but there is lack of approval of such procedures to be financed from social insurance.
3. Female students show greater understanding of transsexual needs than male students.

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